

L Number	Hits	Search Text	DB	Time stamp
1	5842	((calcium adj carbonate) or caco3 or limestone) and charcoal	USPAT; US-PGPUB; EPO; JPO	2003/03/04 14:08
2	573	((calcium adj carbonate) or caco3 or limestone) and charcoal) and vitamin	USPAT; US-PGPUB; EPO; JPO	2003/03/04 14:04
3	161	((((calcium adj carbonate) or caco3 or limestone) and charcoal) and vitamin) and (methionine or (folic adj acid))	USPAT; US-PGPUB; EPO; JPO	2003/03/04 14:07
5	1	("4594249").PN.	USPAT; US-PGPUB; EPO; JPO	2003/03/04 14:08
6	0	((calcium adj carbonate) or caco3 or limestone) and (("4594249").PN.)	USPAT; US-PGPUB; EPO; JPO	2003/03/04 14:09
-	92351	(calcium adj carbonate) or limestone	USPAT; US-PGPUB; EPO; JPO	2003/03/04 13:43
-	2061	((calcium adj carbonate) or limestone) and ((active or activated) adj charcoal)	USPAT; US-PGPUB; EPO; JPO	2003/03/04 14:01
-	7	((((calcium adj carbonate) or limestone) and ((active or activated) adj charcoal)) and (consum\$5 near5 alcohol)	USPAT; US-PGPUB; EPO; JPO	2003/01/29 15:04
-	6	((calcium adj carbonate) or limestone) and ((active or activated) adj charcoal)) and (alcohol near5 (consumed or consuming or consumption))	USPAT; US-PGPUB; EPO; JPO	2003/01/29 15:05
-	297	((((calcium adj carbonate) or limestone) and ((active or activated) adj charcoal)) and vitamin	USPAT; US-PGPUB; EPO; JPO	2003/01/29 15:09
-	1	((((calcium adj carbonate) or limestone) and ((active or activated) adj charcoal)) and vitamin) and olanzipine	USPAT; US-PGPUB; EPO; JPO	2003/01/29 15:09
-	93233	(calcium adj carbonate) or limestone	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:28
-	58995	(active or activated) adj (carbon or charcoal)	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:28
-	5728	((calcium adj carbonate) or limestone) and ((active or activated) adj (carbon or charcoal))	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:29
-	34	((((calcium adj carbonate) or limestone) and ((active or activated) adj (carbon or charcoal))) and (vitamin adj b1)	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:30
-	1	((((calcium adj carbonate) or limestone) and ((active or activated) adj (carbon or charcoal))) and olanzipine	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:30
-	28	((((calcium adj carbonate) or limestone) and ((active or activated) adj (carbon or charcoal))) and (vitamin adj b1)) and (methionine or (folic adj acid) or b6 or b12)	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:31
-	25	(((((calcium adj carbonate) or limestone) and ((active or activated) adj (carbon or charcoal))) and (vitamin adj b1)) and (methionine or (folic adj acid) or b6 or b12)) and alcohol\$2	USPAT; US-PGPUB; EPO; JPO	2003/03/04 11:32
-	1	("5496566").PN.	USPAT; US-PGPUB; EPO; JPO	2003/03/04 13:43

L Number	Hits	Search Text	DB	Time stamp
1	5842	((calcium adj carbonate) or caco3 or limestone) and charcoal	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:08
2	573	(((calcium adj carbonate) or caco3 or limestone) and charcoal) and vitamin	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:04
3	161	(((((calcium adj carbonate) or caco3 or limestone) and charcoal) and vitamin) and (methionine or (folic adj acid))	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:07
5	1	("4594249").PN.	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:11
6	0	((calcium adj carbonate) or caco3 or limestone) and ("4594249").PN.)	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:09
7	76	((((((calcium adj carbonate) or caco3 or limestone) and charcoal) and vitamin) and (methionine or (folic adj acid))) and adsorb\$4	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:16
8	70	((((((calcium adj carbonate) or caco3 or limestone) and charcoal) and vitamin) and (methionine or (folic adj acid))) and adsorb\$4) and (tablet or capsule or powder)	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:33
9	698	(502/416,417).CCLS.	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:33
10	6	((calcium adj carbonate) or caco3 or limestone) and charcoal) and ((502/416,417).CCLS.)	USPAT; US-PPGPUB; EPO; JPO	2003/03/04 14:33



US 20020155103A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2002/0155103 A1**
(43) **Pub. Date: Oct. 24, 2002**

(54) **ACTIVATED CHARCOAL BASED COMPOSITION AND METHOD FOR REDUCING HANGOVER SYMPTOMS ASSOCIATED WITH THE CONSUMPTION OF ALCOHOL CONTAINING BEVERAGES**

(76) **Inventors:** Raymond C. Crippen, Baltimore, MD (US); Manoj Bhargava, West Bloomfield, MI (US); Thomas F. Morse, Walled Lake, MI (US)

Correspondence Address:
PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102 (US)

(21) **Appl. No.:** 10/042,283

(22) **Filed:** Jan. 11, 2002

Related U.S. Application Data

(60) **Provisional application No. 60/260,916, filed on Jan. 12, 2001.**

Publication Classification

(51) **Int. Cl.⁷** A61K 33/44; A61K 33/10; A61K 35/78; A61K 31/551

(52) **U.S. Cl.** 424/125; 424/687; 514/220; 424/725.1

(57) ABSTRACT

The invention provides a composition which is effective in the prevention or delay of the onset of side effects associated with alcohol consumption or the reduction or alleviation of those effects. The composition of the invention includes activated charcoal and limestone, optionally activated limestone. Optionally, the composition of the invention also includes vitamin B1 and/or other agents such as fatigue relieving agents. Preferably, the composition of the invention is provided in the form of tablets or powder encapsulated in a gelatin capsule. The composition of the invention is provided in pre-dosed quantities varying from between about 100 and 500 milligrams per dose. The invention also provides a method of reducing or alleviating the deleterious effects associated with alcohol consumption. The method includes administration, preferably multiple administration at regularly spaced intervals before, during, and after alcohol consumption of a composition containing activated charcoal and activated limestone.